

Trends influencing researcher education and careers: What do we know, need to know and do in looking forward

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Abstract

EARLI SIG 24, Researcher Education and Careers (SIG-REaC), was founded because increasing interest has emerged within the EARLI community into understanding different aspects of doctoral and post-PhD researcher educational and career development. This special issue brings together the outcome of our first scholarly discussion at the SIG-REaC inaugural meeting in September 2014 in Barcelona. The goal of each of the five co-authored papers is to make visible what has been overlooked, and to attend to methodological considerations in order to draw out future lines of research. As a collection, the papers address multiple levels and issues of researcher education: establishing the multifaceted phenomenon that is researcher education and careers and providing key concepts that others might take up, e.g., informal/invisible curriculum; the personal as a sphere of activity that may collide with the sphere of work; drivers of education that can provide cross-national points of comparison. Further, by identifying gaps in the literature, these papers together lay out an ambitious research agenda in a number of areas related to researcher education. In the process, they provide an extensive list of references well worth exploring since they represent the knowledge networks of over thirty researchers. In this editorial paper the Sig-REaC is presented, and the characteristics of the papers, their limitations and some future challenges of researcher education are discussed.

Keywords: Researcher education, career development; Post PhD education; PhD education; cross-cultural research



EARLI SIG 24, Researcher Education and Careers (from now on SIG-REaC), was founded because increasing interest has emerged within the EARLI community into understanding different aspects of doctoral and post-PhD researcher educational and career development. This special issue brings together the outcome of our first scholarly discussion at the SIG-REaC inaugural meeting in September 2014 in Barcelona. Our goal was to construct a richer, more comprehensive view of researcher education and careers: to begin to address the theoretical and methodological challenges underlying research and theory development in this area in order to create a shared agenda for the future.

The meeting (and the preparation for it) launched collaborative writing that challenged us collectively to make transparent different theoretical perspectives, methods and methodologies. Our goal was to negotiate these differences in order to articulate a commonly understood research agenda. While we shared an interest in examining the experiences of early career researchers we come from a variety of locations: geographic, disciplinary, career stage and intellectual tradition. When researchers from different theoretical, methodological, and national spaces want to do 'real work', it takes time to really understand each other and negotiate new understandings. Therefore, the preparation for the SIG-REaC meeting included participants writing individual positions papers in which they addressed the following questions: What are the emerging trends in the research environment essential to better/more fully understand early career researcher (ECR) experience? What do we learn about ECR experience of the emerging trends by looking across the fields of academic communication, sociology of work, pedagogy? What are the gaps? What has been overlooked? What different methods and methodologies have been used across the three fields? Which of these has been productive? What has been overlooked?

In this way, we had the opportunity before the meeting to read each other's thoughts and begin to get a sense of the richness and diversity in the group as well as common concerns, conceptions or methodologies. The preparation for the SIG-REaC meeting also included launching pre-discussions via Moodle, based on reading each other's papers. Altogether 31 scholars from fourteen different countries participated in the SIG meeting, where we launched co-writing, and worked together in small groups intensively for two days. Post-meeting, this face-to-face work shifted to virtual exchanges and the special issue represents the results of our continued discussion over ten months.

The Special Issue consists of five co-authored papers. The goal of each is to make visible what has been overlooked, and to attend to methodological considerations in order to draw out future lines of research. Each of the papers addresses a specific aspect of researcher education and careers in order to develop a future research agenda:

- *Drivers and Interpretations of Doctoral Education Today* contributes to the literature on researcher education by examining the ways in which core global trends and drivers of higher education emerge in different guises at national levels. The paper compares recent doctoral education changes in the following countries – Canada, Colombia, Denmark, Finland, UK, and the USA – to provide insights on how global trends translate into local policies. By using the same global drivers as criteria across national boundaries, it is possible to see how educational policies are formed in considerably different ways. This raises questions about the universality of the PhD. In the discussion, a research agenda for comparative studies is discussed.
- *The curriculum question in doctoral education* begins by stating that although a global trend in researcher education has been developing more systematic doctoral education to enhance the quality of research and researchers, the value of a curricular perspective has remained largely unexplored both theoretically and empirically. It is argued that adopting an explicit curriculum approach is significant not only because it might help to disclose the tensions, but also because it allows us to face and reinterpret current challenges to doctoral education. First the concept of the curriculum in doctoral education is discussed and tensions between the formal/informal, open/hidden, and standardised/pluralised dimensions of curriculum are discussed. Then, processes –how the curriculum is experienced- and outcomes – assessment and employability- of doctoral education are addressed. Finally, a research agenda drawing on notions of curriculum to help reconfigure doctoral education is proposed.



- *The doctorate as an original contribution to knowledge: Considering relationships between originality, creativity, and innovation* explores the meaning of originality in doctoral studies and its relationship with creativity and innovation. The paper opens up discussion about the taken-for-granted traditional expectation of ‘originality’ as an outcome of doctoral research. It does so by juxtaposing ‘originality’ with the notions of ‘innovation’, and ‘creativity.’ By exploring the similarities and differences among the concepts, the paper provides insight into both the possible meanings of ‘originality’ in research as well as the utility of the term in the context of 21st century knowledge societies. Some future research steps are suggested to move towards unpacking the relationship between doctoral training conditions and outcomes, in the sense of fulfilling the requirement of originality.
- *Mentoring: a review of early career researcher studies* describes the result of a focused literature review of studies on early career researcher as a base for further inquiry into mentoring, given the frequent reference to mentoring as a source of support for early career researchers, e.g., EU Concordat on researchers. The most striking finding of this analysis was the un- and under- conceptualized nature of empirical studies. There is much research to do, first, to better inform our conceptualization of early career researcher mentoring and, second, to better understand the value of specific aspects of mentoring support.
- *Researcher Identities in Transition: Signals to Identify and Manage Spheres of Activity in a Risk-career* argues that changes in ‘knowledge societies’ mean researchers are now embarked upon what could be defined as a ‘risk-career.’ This paper uses a framework of researcher identity produced by analysing spheres of activity and individuals’ ability to identify and interpret external signals (expectations, constraints and opportunities) to account for theoretical assumptions about researcher identity. It is argued that applying the framework to empirical examples of tensions in identity construction provides the basis for future research to unravel the complex interplay between signals and spheres of activity when dealing with the tensions and struggles of becoming a researcher.

As a collection, the papers address multiple levels and issues of researcher education: establishing the multifaceted phenomenon that is researcher education and careers and providing key concepts that others might take up, e.g., informal/invisible curriculum; the personal as a sphere of activity that may collide with the sphere of work; drivers of education that can provide cross-national points of comparison. Further, by identifying gaps in the literature, these papers together lay out an ambitious research agenda in a number of areas related to researcher education. In the process, they provide an extensive list of references well worth exploring since they represent the knowledge networks of over thirty researchers.

Still, there are limitations represented in this special issue. While it has explored in depth a number of issues, we are mindful there remains much to explore. For instance, they mostly focus on doctoral experience, as does much of the research in this area. So we encourage ourselves and other researchers to pay greater attention to postdoctoral experience, both in and out of academia. For instance, the vertical transition from doctoral student to post-doctoral researcher still remains largely uncharted, as do horizontal transitions e.g. from academia to other types of careers.

We know that internationally, more than half of PhD graduates leave academia whether by choice or lack of opportunity (Barnacle & Dall’Alba, 2011). What appears to be emerging internationally is a range of alternate academic positions: contract teaching, contract post-PhD research, and increasingly teaching-only lecturer positions, as well as administrative positions related to research and teaching. In the non-academic context, emerging types of employment include business, government, NGOs, banking, industry, and previously unknown positions, e.g., start-ups. Unfortunately we know little of the experience of individuals in any of the three fields, e.g., the extent to which they have the skills needed, their satisfaction with their employment, what range of genre they use. This is especially the case as regards a theoretical perspective since most of the available evidence is non-theorized survey data. Such studies are needed to gain better understanding of the complexity of researcher careers.

As well, postdoctoral supervision is also an underexplored issue that deserves more research interest. Post-PhD researchers consistently report they do not receive supervisory support to develop as researchers, further that they are even discouraged from seeking out professional development opportunities themselves.



As long as such individuals are not conceived as becoming researchers, the supervisory attitudes they report are unlikely to change

Concluding remarks

This special issue maps some of the uncharted terrain of inquiry into researcher education and careers. National developments in researcher education are affected by the global forces which, however, take different forms in national and local contexts. This became particularly apparent to us at our Barcelona meeting where we represented fourteen different national contexts. There is still an insufficient understanding of how and in which forms global trends (which we collectively believe we understand) are translated into the local practices of researcher education, and their effect on doctoral education and academic work (which we collectively may not understand, though believe we do). Accordingly, our overall conclusion is the need for well-designed international comparative studies so that as researchers we can gain a concrete understanding of the effects of global developments for researcher education and careers.

We hope that the papers in this special issue evoke curiosity, provoke discussions and stimulate both theoretical and especially empirical research on researcher education and careers. The various approaches, empirical evidence and challenges identified in the papers highlight the importance of and the need for further research into this fascinating area. We look forward to lively discussion, commentaries and research papers addressing the new terrains in this area of research and encourage you to join us in EARLI SIG 24, Researcher Education and Careers (SIG-REaC).

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